



**Overview:**  
 Information Technology careers encompass entry level, technical, and professional careers related to the design, development, support and management of hardware, software, multimedia, and systems integration services.

- Pathway Options:**
- Network Systems
  - Information Support and Services
  - Web and Digital Communications
  - Programming and Software Development

**Occupation Examples:**  
 Animator, Database Administrator, Data Systems Designer, E-Business Specialist, Game Developer, Information Technology Engineer Media Specialist, Network Administrator, Network Security Analyst, PC Support Specialist, Programmer, Software Applications Specialist, Systems Administrator, Telecommunications Network Technician, User Support Specialist, Virtual Reality Specialist, Web Architect/Designer

For a complete listing, go to:  
<http://online.onetcenter.org/find/career?c=4&q=Go>

**SUGGESTED HIGH SCHOOL COURSES**

Based on State Graduation Requirements and Montana College Admissions Criteria: <http://mus.edu/admissions.asp>  
 For more information, talk to your school counselor

9 <sup>th</sup>	Graduation Requirements 2-Year College Prep	English, Math, Earth Science (lab science), Health Enhancement	<p><b>Cluster Foundation Courses:</b>          Information Technology          Introduction to Business</p> <p><b>Pathway Courses:</b>          Cisco I, II          Computer Programming I, II          Software Applications I, II          Web Design I, II          Oracle Academy</p> <p><b>Student Organization(s):</b>          BPA          SkillsUSA</p>
	4-Year MT College/Univ Prep (Rigorous Core)	English, Algebra I, Earth (lab) Science, Health Enhancement and 3 years of the following: World Language/Computer Science/Visual or Performing Arts/Career & Tech Ed	
	<b>Career-Related Electives</b>	<b>Cluster Foundation Courses</b>	
10 <sup>th</sup>	Graduation Requirements 2-Year College Prep	English, Math, Biology (lab science), Global Studies	
	4-Year MT College/Univ Prep (Rigorous Core)	English, Geometry, Biology, Global Studies, and 3 years of the following: World Language/Computer Science/Visual or Performing Arts/Career & Tech Ed	
	<b>Career-Related Electives</b>	<b>Cluster/Pathway Courses</b>	
11 <sup>th</sup>	Graduation Requirements 2-Year College Prep	English, U.S. History, Visual/Performing Arts	
	4-Year MT College/Univ Prep (Rigorous Core)	English, U.S. History, Algebra II, Chemistry or Physics and 3 years of the following: World Language/Computer Science/Visual or Performing Arts/Career & Tech Ed	
	<b>Career-Related Electives</b>	<b>Pathway Courses</b>	
12 <sup>th</sup>	Graduation Requirements 2-Year College Prep	English, Government	
	4-Year MT College/Univ Prep (Rigorous Core)	English, Government, Social Studies, College Prep Writing, (additional math encouraged), and 3 years of the following: World Language/Computer Science/ Visual or Performing Arts/Career & Tech Ed	
	<b>Career-Related Electives</b>	<b>Pathway Courses</b>	

**ADVANCED LEARNING OPPORTUNITIES**  
 High School to College/Career Linkages

- Tech Prep courses:
- Advanced Placement courses:
- Running Start opportunities:
- Work-based Learning:
- On-line Learning:

## MONTANA POSTSECONDARY OPPORTUNITIES

*Montana University System Degree and Program Inventory: <http://www.homepage.montana.edu/~mus/drginv/>  
Your Guide to Montana's Certificate and Associate Degree Programs: <http://mus.edu/twoyear/YourGuide.html>*

<b>Colleges of Technology:</b> BLCOT—Billings; GFCOT—Great Falls; HCOT—Helena; TECHCOT—Butte; UMCOT—Missoula	<b>Community Colleges:</b> DCC—Glendive; FVCC—Kalispell; MCC—Miles City	<b>Tribal Colleges:</b> BFCC—Browning; CDKC— Lame Deer; FBCC—Harlem; FPCC—Poplar; LBHC—Crow Agency; SCC—Box Elder; SKC— Pablo	<b>Four Year Colleges/Universities:</b> MSU—Bozeman; MSUB—Billings; MSUN—Havre; TECH—Butte; UM— Missoula; UMW—Dillon
<b>MILITARY</b>	<ul style="list-style-type: none"> <li>Requires diploma or GED</li> <li>17 with parental consent; 18 without</li> </ul>	Air Force, Air Guard, Army, Coast Guard, Marines, Navy For more information: <a href="http://todaysmilitary.com">http://todaysmilitary.com</a>	
<b>PROFESSIONAL CERTIFICATE</b>	<ul style="list-style-type: none"> <li>Requires diploma or GED</li> <li>Less than 30 credits; little/no general ed credits</li> <li>Complete in one year or less</li> </ul>	Information Tech & Network Administration—UMW Office Information Tech—MCC CISCO—GFCOT Microsoft User Specialist--GFCOT	
<b>APPRENTICESHIP</b>	<ul style="list-style-type: none"> <li>Requires diploma or GED</li> <li>Must be at least 18</li> <li>Minimum 2,000 hours of supervised experience</li> </ul>	See the MT Dept of Labor website for more information:  <a href="http://wsd.dli.mt.gov/apprenticeship/default.asp">http://wsd.dli.mt.gov/apprenticeship/default.asp</a>	
<b>CERTIFICATE OF APPLIED SCIENCE</b>	<ol style="list-style-type: none"> <li>1. Requires diploma or GED</li> <li>30-45 credits; limited general education credits</li> <li>Complete in one year or less</li> </ol>	Computer Assistant—HCOT, TECHCOT, GFCOT Computer Systems Tech—MCOT Network Infrastructure--GFCOT	
<b>ASSOCIATE'S OF APPLIED SCIENCE DEGREE</b>	<ul style="list-style-type: none"> <li>Requires diploma or GED</li> <li>60-72 credits; includes 15-25 general ed credits</li> <li>Complete in two years (<i>if prepared academically in math and English</i>)</li> </ul>	Computer Design/Graphics—MCC Computer Programming—HCOT, BLCOT Computer Technology—MCOT, DCC, MCC Information Processing—UMW Network Architecture--GFCOT Network Management—MCOT Network Support—BLCOT Web Design—GFCOT Web Development—TEHCOT, DCC Webmaster—HCOT	
<b>BACCALAUREATE DEGREE</b>	<ul style="list-style-type: none"> <li>Requires 4-year college prep for admission</li> <li>128 credits (approximately)</li> <li>Complete in four years</li> </ul>	Computer Engineering—TECH, SKC, MSUN Computer Info Systems—MSUN Computer Science—MSU, TECH, UM Information Systems—UM Information Technology--SKC	